

The Locus of Decision-Delegation among Japanese Multinational Enterprises: An Empirical Study

Susumu Ueno

Graduate School of Accountancy

Konan University, Japan

ueno@konan-u.ac.jp

Paul Scarbrough

Faculty of Business

Brock University, Canada

pscarbrough@brocku.ca

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ABSTRACT: This study investigates decision delegation from headquarters to overseas subsidiaries of Japanese MNEs. We examine differences across three decision domains as well as between subsidiary geographic locations. The decision domains are, first, general management decisions related to strategy and management/operations; second, IT development decisions; and third, transfer pricing. The empirical results indicate that, generally, the decision authority for management/operational decisions is more extensively delegated to overseas subsidiaries than decision authority for strategic decisions. The decision delegation for international transfer pricing is found to be low. There are differences between subsidiaries in different geographic locations. In general, the delegation of decision authority for all decision domains is broader to North American and European subsidiaries than to Asian subsidiaries. We show that decision delegation is not a monolithic activity, but a complex activity which is not yet fully comprehended by theory.

Keywords: locus of decision-making; overseas subsidiaries; Japanese MNEs; IT systems investment decisions; international transfer pricing decisions

Data Availability: Data are available on request.

I. INTRODUCTION

Since the 1970s Japanese enterprises have expanded their overseas operations greatly. Today, foreign sales and profits are crucial determinants of their overall business performance. They have thus become Multi-National Enterprises (MNE).

An MNE has its management headquarters in one country, known as the home country, and operates in several other countries, known as host countries. In order to manage business performance, MNEs must delegate portions of their decision authority to subordinate units for a number of reasons (discussed below). This is similar to the control issues faced by any multi-division organization, but made more complex due to the differences in culture, language and laws. Effective delegation of decision authority is critical to MNEs in all countries for timely implementation of business strategies and for management control (Du, Deloof and Jorissen 2010). As well, appropriate delegation leads to higher performance for US MNEs (Du, et al., 2010).

In a study concerning Japanese listed companies on the first section of the Tokyo Stock Exchange, Miyajima and Inagaki (2003) report that the more a company delegates authority to business divisions, the higher the company's performance.

The present study investigates the extent of decision delegation from Japanese MNE headquarters to overseas subsidiaries. An MNE in this study is a company that runs overseas operations. In fact, most companies in our sample have multiple affiliates in multiple countries.

Studies of the locus of decision-making have been conducted in a variety of academic fields in the last several decades. Klatzky (1970) is one of the early researchers who focused on the locus of decision-making in management. There are many more recent studies described in the next section.

It is a common perception in Japan that Japanese MNEs have been too slow in localizing and internationalizing management (Nakamura 2005). Business journals and media in Japan have frequently reported that Japanese MNEs are far behind American and European rivals in this respect. In contrast to American and European companies, at most overseas subsidiaries of Japanese MNEs, Japanese expatriates occupy top management positions and local people are rarely promoted into the subsidiary's senior management. Moreover, foreign nationals very rarely become board members of the Japanese parent company.

This study focuses on two key aspects of decision allocation: the type (nature) of the decision and the location of the subsidiary. Within these two aspects, we examine three decision domains: 1. *Overall decisions* (three subtypes examined, see below); 2. *IT systems investment decisions* (for initial installment and replacement); and 3. *International transfer pricing decisions*. The

latter two domains are subsets of the first domain that are particularly relevant for management accounting. Research questions and exploratory hypotheses are developed for each domain and the hypotheses are empirically tested by examining questionnaire data.

The *overall decisions* domain is further divided into three: strategic decisions, management decisions, and operational decisions. Strategic decisions in this study are described as decisions that impact the long-term direction of an entire company, or impact the organizational architecture. Management decisions focus on more intermediate-term issues. Operational decisions focus on day-to-day activities of a company and help to ensure that daily activities proceed smoothly. Details about these three types of decision are presented in the hypothesis development section.

There is a variety of interesting research topics concerning Japanese MNEs. For example, how do changes in the national culture of Japan interact with the changes of organizational culture among Japanese MNCs? How have they been engaging in enculturation of foreign associates? What has been going on within their overseas subsidiaries with respect to acculturation in the current information and communication technologies age?

By investigating differences in decision delegation across three decision domains as well as between subsidiary geographic locations, this study specifically aims to provide cues to Japanese MNEs for their improving their organizational architecture in a multi-national context. Findings from this study are expected to add new knowledge to existing theories in management and cross-cultural studies also.

The paper is composed as follows. The next section discusses the research background, identifies research questions and then develops hypotheses. The data collection section follows with the description of the questionnaire employed, its distribution and respondents. This is followed by the results section. The paper concludes with a summary and discussion section.

II. BACKGROUND AND HYPOTHESES

Decision-making Location in Context

The location where decisions are made in the multi-business organizational architecture has been an active research area for decades. Many different functional areas have unique research streams active in this area. One of the most traditional approaches is the centralize-versus-decentralize issue. Early on this was seen as simplistic and it became clear that in management accounting it was not so much the ownership of tangible assets, but the individual decisions that were important.

There has been a strong trend to more decentralization (Malone 2004; Robinson and

Stocken 2010). Robinson and Stocken (2010) extend this into a preliminary examination of performance and indicate that appropriately decentralized firms perform better. Additionally, Habib and Victor (1991), and Caves (1996) also examine the effect of organizational structure on performance.

Almost all the functional areas of business research have active research streams examining this issue. Many papers seek to anchor their work in the neo-classical understanding of the firm's purpose to be profit maximization (c.f. Robinson and Stocken 2010). They follow in the well-trod path of Jensen and Meckling (1992) which states that organizational structure is a coordination mechanism to assign decision rights and motivate agents to alignment with owners. Jensen and Meckling (1976, 1992) do not address the value creating portion of the equation, of which one of the earliest exponents was Hayek (1945) who introduced the idea of fusing knowledge and decision-making authority—implying decentralization. These two concepts appear to be balanced in current thinking: knowledge and decision-making authority should be joined, but if too well joined there may be agency problems. We see this set of concerns in a number of studies such as Du et al. (2010) and Robinson and Stocken (2010).

The Locus of Decision-making

The locus of decision-making is decentralized to the extent to which there are multiple decision-makers involved. The concept of the locus of decision-making is closely interwoven with the concepts of participation and empowerment.

Mintzberg (1983), Stoner et al. (1994), Bartol et al. (1998); Robbins et al. (1998) and Lewis et al. (2001) describe the locus of decision-making as the centralization and decentralization within an organization. If top management makes the organization's key decisions with little input from lower management, then the organization is centralized. In contrast, the more that lower management provides input or is actually given the discretion to make decisions, the more decentralization there is.

Prior studies have focused on two kinds of issues concerning decision delegation in MNEs (Dunning et al. 2008, p.250). The first is the extent to which the locus of decision-making is delegated between the headquarters and its regional offices or affiliates: and also how the locus is likely to vary according to the kind of decisions that have to be taken. The second concerns the nationality of decision makers and whether they are appointed by the MNE or one of its affiliates. In the present study we examine the first issue: the extent of delegation of decision authority between headquarters and subsidiaries.

The Locus of Overall Decision-making between Headquarters and Overseas Subsidiaries

The first research domain deals with the locus of *overall decisions* between the headquarters of a Japanese MNE and its overseas subsidiaries. MNEs have to maintain control of the strategy of overseas subsidiaries while giving them the flexibility they need to deal with their own unique situations (Hill and Jones 1992). The corporate headquarters usually has authority to set overall corporate strategies and the architecture of the whole organization. It delegates a certain amount of its decision authority to its overseas subsidiaries so that effectiveness of the whole company can be maintained and improved. This mechanism is called “coordinated decentralization” (Czinkota et al. 1994).

The Locus of Decision-making of Strategic Decisions and Management/Operational Decisions

There is evidence that the locus of decision-making is dependent on decision type. Figure 1 (Miyajima and Inagaki 2003) shows the degree of decision authority delegation by functional areas and organization types among Japanese companies listed on the first section of the Tokyo Stock Exchange (excluding electricity, gas, financial, and insurance companies). In-house company systems (company systems) are a Japanese type of decentralization which has been increasing in frequency and now exceeds the traditional division form.¹ They are different from the conventional divisions that have been employed by Japanese multi-divisional companies. Under the “company systems,” more decision authority concerning functions such as production, sales, investment, and research and development have been delegated to in-house company presidents. Also, strict performance indicators and rigorous monitoring systems are used. Although Figure 1 does not focus on overseas subsidiaries directly, it provides some idea about how the decision delegation to subsidiaries differs by function inside Japanese listed companies.

(Insert Figure 1 about here)

The three types of decisions (strategic decisions, management decisions and operating decisions) are described in the introduction section. As can be seen in Figure 1, these three types of

¹ In Japanese MNEs such as Panasonic, in-house companies usually comprise multiple product divisions. Overseas manufacturing and sales subsidiaries are controlled by both a regional headquarters (RHQ) and a product division. That is, the subsidiaries report to both units (because it is a matrix style organization).

decisions are normally made at different echelons in traditional firms. Strategic decisions such as financial decisions or organizational architecture are normally made at the highest level since they can impact the entire organization. Management decisions are normally made at intermediate levels since they impact employees primarily and not customers. Operating decisions, including Sales and customer relations as well as operating business decisions are made at lower levels, and sometimes at the very lowest level since they impact the actual value creation activities. Extending this to the MNE context, conventional wisdom in organization theory would indicate that the delegation of decision authority to overseas subsidiaries is more extensive for management or operational decisions than for strategic decisions.

There are several possible reasons for this assignment of different decisions to different echelons of the organization; they include enhanced linking of customers to decision-makers in the local economy to reducing the information processing load for managers by removing the need to transmit coordination information to headquarters. The theory also asserts that along the firm's development path, management and operational decisions are delegated earlier in time, and the delegation of strategic decisions follows. This leads to the first hypothesis (stated in the alternative form):

H1: The delegation of authority to overseas subsidiaries of Japanese MNEs is much more extensive for management and operational decisions than for strategic decisions.

Influences of Subsidiary's Geographical Locations

Japanese MNEs generally consider that Asia, North America (defined as Canada and the USA) and Europe are different in the nature of their capacity to participate in modern business (as described below) and at the same time, very important for business expansion. All three geographical regions are used in this study to investigate differences in organizational architecture due to the parent companies beliefs about the capacity of the subsidiary to make certain classes of decision.

Managers' judgment and behavior is based on their perception. The stereotypes about these regions held by managers come from the inferences the managers make about the society and culture of the regions. Although research studies such as Du et al. (2010) and Robinson and Stocken (2010) focus on purely economic analyses—balancing the notions of decision utility and agency costs—it is widely believed among Japanese researchers that there is an underlying cultural bias which impacts these decisions in Japanese MNEs. According to Japanese managers' notions, the USA and Canada have a well-developed business culture, a strong and stable democracy and allow foreign investment easily. Europe, to most Japanese

managers, means the UK, Germany, France and other developed EU countries with strong business and democratic histories, but less openness to foreign, especially Asian investments. On the other hand, Asia, to Japanese managers, is Taiwan, Korea, Thailand, Malaysia, China, India, Vietnam, etc. The stereotypical images of these countries held by the Japanese manager are that they are less developed, less stable and less democratic. These notions are intuitive, and most Japanese managers know Asian countries have been enjoying dynamic economic and cultural growth in the past couple of decades, yet the stereotypes remain.

Four alternative explanations for the difference of the locus of decision-making for different locations are presented below. All four lead to the same hypothesis, H2. The first refers to the function of the overseas subsidiary at their start-up stage. Subsidiaries of Japanese MNEs in Asian countries were started as manufacturing bases for exploiting local cheap labor forces with the intention of selling the products outside of the host country. North American and European subsidiaries of Japanese MNEs started off as marketing bases for cultivating affluent local markets. Marketing requirements indicated the need for faster responses so that their local customer's demands are satisfied quickly, thus manufacturing was set up in developed countries for different reasons than in Asian countries. The Japanese headquarters copes with the situation by delegating broader decision authority to the marketing-focused subsidiaries. This reasoning leads to an assertion that the delegation of decision authority should be much broader to American and European subsidiaries than to Asian subsidiaries.

The second logic is based on the perceived differences in labor quality. Management markets in North America and Europe have longer and deeper history than those of Asia have. This implies that the replacement of expatriates with locally-recruited managers is much easier in North America and Europe than in Asia.

Thirdly, cultural values held by local managers (Ueno and Sekaran 1992; Ueno 1993, 2001; Ueno and Wu 1993) explain the geographical differences of the locus of decision-making. According to Japanese manager's stereotyped views about cross-cultural differences, North Americans and Europeans tend to share a higher internal locus of control and self-actualization than Asians do. Individuals with a high internal locus of control believe that their own behavior and actions primary determine events. Those with a high external locus of control believe that powerful others, fate, or

chance primarily determine events.² Managers with high internal locus of control are believed to be more capable managers and more attractive to the Japanese headquarters—even though they do not mirror Japanese tendencies to low internal locus of control.

The fourth logic is as follows. Japanese managers think they share values, norms, and beliefs much more with East Asians than with North Americans and Europeans. The close cultural proximity with Asia might provide Japanese companies confidence that they can maintain direct control of Asian overseas subsidiaries by headquarters. All four of these lines of reasoning lead to similar implications, thus the second hypothesis (stated in the alternative form):

H2: The delegation of decision authority to overseas subsidiaries is much broader to American and European subsidiaries than to Asian subsidiaries.

Subsidiary's IT Systems Investment Decisions

According to Lawrence and Lorsch (1967), companies that manage to achieve high sub-unit differentiation and yet still maintain high integration between sub-units seem to be best equipped to adapt to environmental changes. Here, integration is described as the process of achieving unity of effort among the various subsystems in the accomplishment of the organization's task. Today, IT is broadly used by the diversified MNEs as a tool for achieving high subunit differentiation while still maintaining high integration between subunits.

The Locus of Decision-making for Overseas Subsidiary's IT Systems Investments: Analyses by Geographical Locations and Systems' Functions

The locus of decision-making of IT systems investments is investigated from two perspectives. First, the subsidiary's geographical locations (Asia, North America, Europe) provide one perspective, and second, the IT systems' functions (financial accounting, management accounting, personnel management (salary & wages)) provide one more perspective.

Hypothesis H1 asserted that the overall decision authority is delegated more broadly to American and European subsidiaries than to Asian subsidiaries. Following this logic, the third hypothesis states:

H3: The delegation of decision authority for subsidiary's IT systems investments is much broader to American and European subsidiaries than to Asian subsidiaries.

² The question of whether people from different cultures vary in locus of control has long been of interest to social psychologists (Berry, Poortinga, Segall and Dasen 1992).

Does the authority delegation of IT systems investment decisions differ based on the functions of the IT system? Three functions, personnel management (salary and wage), financial accounting and management accounting, are highlighted in this study. Accounting practices are usually more calculation-oriented and more technical and seem to be universal across countries. On the other hand, personnel management practices of companies reflect cultural heritages of the society to a great extent. In this study we focus on wage and salary administration as being characteristic of this function. Thus, the fourth hypothesis, stated in the alternative form, follows:

H4: The delegation of decision authority to overseas subsidiaries is much broader for personnel management systems than for accounting systems.

The Relationship between the Locus of Decision-making for Subsidiary's IT Systems Investments and the Locus of Overall Decision-making

Some IT investments at overseas subsidiaries can impact the interface between subsidiaries and headquarters, thus these decisions are strategic. However, most IT investment decisions belong to management/operational decisions when they aim to improve internal management processes. In order to investigate the nature of the IT investment decisions, the locus of IT investment decisions is compared with both the locus of overall strategic decisions and the locus of overall management/operational decisions. Positive relations are expected, and the following two hypotheses, stated in the alternative form, follow:

H5.1: The locus of subsidiary's IT systems investment decisions is positively related to the locus of overall strategic decision-making.

H5.2: The locus of subsidiary's IT systems investment decisions is positively related to the locus of overall management/operational decision-making.

International Transfer Pricing Decisions

Large decentralized companies have many affiliated business units. Goods, services, financial instruments and even intellectual property are transferred among units. As businesses increasingly globalize supply chains and try to optimize their resource allocation, international transfer prices play a key role. More and more, governments are creating transfer pricing rules and regulations (Radebaugh and Gray 1994). Our research question is "who, either a headquarters or a subsidiary, holds the leadership role in international transfer pricing decision processes."

The Locus of Decision-making for International Transfer Pricings

Transfer pricing decisions determine where profit will be recognized. International transfer prices

can thus determine cash-flow levels of business units located in multiple tax jurisdictions and for the entire MNE. Thus parent-subsidiary relationships are significantly influenced by international transfer pricing decisions. In this meaning, the decision is a strategic decision (Geringer and Hebert, 1989).

The Relationship between the Locus of Overall Strategic Decision-making and the Locus of International Transfer Pricing Decisions

The Locus of international transfer pricing decisions is a part (subset) of the locus of overall strategic decision-making. Thus Hypothesis 6, stated in the alternative form, follows:

H6: The locus of international transfer pricing decisions is positively related to the locus of overall strategic decision-making.

Analytical Framework

Figure 2 presents the analytical framework for the study. The upper component shows the two research questions concerning the locus of overall decision-making between headquarters and overseas subsidiaries. It posits two hypotheses; one (H1) refers to the differences of the locus of decision-making in the *overall decisions* domain (strategy-operation distinction). The other (H2) refers to subsidiary geographic locations.

(Insert Figure 2 about here)

The component at lower left refers to the locus of overseas subsidiary's IT systems investment decisions (who is the leading entity, either a headquarters or an overseas subsidiary in the decisions?). It has four hypotheses, H3, H4, H5.1 and H5.2. The third component of the framework raises H6 that refers to the locus of international transfer pricing decisions.

This study investigates the locus of decision-making between headquarters and overseas subsidiaries among Japanese MNEs with respect to decision nature as well as subsidiary geographic locations. Among the seven hypotheses, the four hypotheses, H1, H5.1, H5.2 and H6 concern the decision nature, and H1 specifically investigates differences of decision delegation in the *overall decisions* domain described above. Other three hypotheses, H2, H3, and H4 investigate decision delegation by subsidiary geographic locations.

The hypotheses developed here are tested with survey data described below.

III. DATA COLLECTION

This study is a part of a large survey project that investigated current management accounting practices of Japanese MNEs by questionnaire. The categories (fields) investigated in the project are relations between headquarters and overseas subsidiaries, methods of foreign direct

investment, decisions of international transfer pricing, performance evaluation methods, methods of investment to information technology, and global distributions of business operations and ownerships.

Multiple questionnaire items are developed for each category. The letter explaining the study and soliciting cooperation as well as the questionnaire were pretested. Based on the pretest, some items were changed, deleted or added to improve validity. To control variability of respondents' perceptions and/or recognition of certain concepts used in the questionnaire, explanations are added to some items. For example, strategic decisions are explained by additional text such as "decisions concerning starting up a new factory, a new selling-base and/or a new enterprise."

It should be noted that most questionnaire items related to this study asked respondents to rate their perceived extent of authority delegation to overseas subsidiaries with 5-point Likert scales.

Questionnaire Distribution and Respondents

The data were collected via a mail questionnaire mailed to the MNE's headquarters' managers in charge of international affairs (global management) of 523 Japanese MNEs listed at the first section of the Tokyo Stock Exchange, in February 2004³. A corporate address and an individual name were written on each envelope.

Seventy four responses were returned (the response rate, including partial responses, is 14.15%). Table 1A shows the industry distribution of responding companies. The questionnaire included questions about global distribution of business operations and ownership, e.g., numbers of overseas subsidiaries, distribution of employees, shareholders, shareholdings, sales and assets by region and country. However, many respondents failed to provide detailed answers for these questions.

(Insert Table 1 about here)

Forty two companies out of the 74 responding MNEs answered that they have overseas subsidiaries in all three regions (Table 1B). Among the respondents, Hitachi Ltd is the largest. The company had 326,500 employees, 404 overseas subsidiaries and 708 domestic subsidiaries at the time

³ Managers in construction, financial and real estate businesses were excluded because the contents and nature of some questionnaire items are not appropriate to them. For example, real estate companies were excluded because they have not globalized in the way manufacturing companies have.

surveyed. Their consolidated annual sales for the year ended March 31, 2004 was 8, 832 billion Japanese Yen (about 115 billion USD). Large MNEs such as Mitsubishi Motors, Komatsu Ltd., Sharp Corporation, Kirin Brewery Corporation, Kikkoman Company, Limited are appeared among respondents.

IV. EMPIRICAL RESULTS

Data were analyzed using descriptive analyses, Paired Samples (dependent) T-test of a correspondence sample and Spearman Rank Correlation. The Paired Samples t-test is used because this study analyzes paired samples. This implies that each individual observation of one sample has a unique corresponding member in the other sample.

Each hypothesis in this study posits a direction as described at Section II, In other words, one of the rejection regions "sufficiently small" or "sufficiently large" is preselected, however, since the study is exploratory in nature, a 2-tailed test of significance at 5% level is applied. Spearman's Rank Correlation is used in this study to test the direction and strength of the relationship between two variables surveyed.

The Locus of Decision-making by Decision Nature and by Subsidiary's Locations (H1 & H2)

According to Table 2A, the mean values of the locus of management/operational decisions are larger than those of strategic decisions in all three geographic locations, indicating that the authority delegation of management/operational decisions are broader than that of strategic decisions. The mode of strategic decisions is 2 (most authority is reserved by parent) at all locations. The mode for management/operational decisions is 4 (a portion of authority is reserved by a parent) in all locations. These results are consistent with the posited direction of Hypothesis 1. However, it should be noted that values of 2 (most authority is reserved by parents) and 3 (fifty-fifty) are also observed frequently for management /operational decisions.

The broad variability of values for the Locus of decision-making by Subsidiary's Locations might be the effects of uncontrolled variables, such as subsidiaries' sizes, lengths of operations, types of business in each location. However, observed low values of both averages and modes of strategic decisions in Table 2A allow an interpretation that the overseas subsidiaries of Japanese MNEs have very little autonomy. The interpretation coincides with the stereotyped view that Japanese expatriates have a strong tendency to depend upon the head office.

(Insert Table 2 about here)

Table 2B shows the analysis of paired comparison (or dependent) t-test of a correspondence sample. A paired comparison t-test was applied to a paired sample consisting of responses by the same respondent. The test investigates mean differences between the locus of strategic decision-making and the locus of management/operational decision-making. The mean values in Table 2A indicate that authority delegation is broader in management/operational decisions than in strategic decisions. In fact, the mean differences in Table 2B are significant (p value = .000) at all locations. Thus Hypothesis 1 is supported at 5% level of significance.

Paired comparison (or dependent) t-test of a correspondence sample is also conducted to test Hypothesis 2. The hypothesis posits that the delegation of decision-making authority is much broader to North American and European subsidiaries than to Asian subsidiaries. The Paired Differences between American and Asian subsidiaries in Table 3 is significant at 5% level, indicating that the authority delegation to North American subsidiaries of both strategic and management/operational decisions is broader, compared with those to Asian subsidiaries. However, concerning Paired Differences between European and Asian subsidiaries, only management/operational decisions is significant at 5% level. No significant Paired Differences are observed between American and European subsidiaries. Hypothesis 2 is supported partially.

(Insert Table 3 about here)

The Locus of Decision-making for Overseas Subsidiary's IT Systems Investments (H3 & H4)

The mean values of the locus of decision-making concerning IT systems investments at overseas subsidiaries in Table 4 are relatively high, indicating that the authority delegation to local subsidiaries is relatively extensive. The mean values in the table also indicate that the delegation of decision authority to North American and European subsidiaries is much broader than to Asian subsidiaries. However the results of the paired comparison (or dependent) t test in Table 5 partially support Hypothesis 3 at 5% level of significance; Significant differences are observed only between Asian and American subsidiaries with respect to the investments to financial and management accounting functions.

(Insert Table 4 about here)

(Insert Table 5 about here)

Score patterns for financial accounting and management accounting in Table 4 seem to be quite similar. One interpretation of the similar score patterns is that, concerning the locus of decision-making of IT systems investments, there is no reason for companies to differentiate both. As

suggested before, both financial and management accounting are more calculation-oriented, more technical. Both are universal practices in nature, compared to personnel (salary & wage) management practices. The similar patterns may also be caused by the lack of accounting knowledge in the respondents. All the respondents are not necessarily accounting experts, thus, some may not differentiate management accounting from financial accounting.

Hypothesis 4 is developed based on an assertion that the personnel management reflects cultural heritages much more than accounting management does. Paired comparison (or dependent) t-tests are conducted to investigate the influences of functions on the locus of decision-making concerning subsidiaries' IT systems investments. The paired comparison (or dependent) t-test compares systems functions (by choosing two among three functions).

The Paired Differences in Table 6A indicates that, for the Asian and European subsidiaries, the delegation of decision authority of personnel management systems investments is significantly more extensive, compared to the delegation of decision authority of systems investments to other two functions (financial accounting and management accounting). The mean differences are significant at 5% level. However, similar results could not been obtained for the North American data. The high level of authority delegation to North American subsidiaries in all three functions (see Tables 4 and 6 A) explains the small differences. Hypothesis 4 is not supported fully.

(Insert Table 6 about here)

Relationships between the Locus of Overall Decision-making and the Locus of Decision-making for Overseas Subsidiary's IT Systems Investments (H5.1 & H5.2)

IT systems investments at overseas subsidiaries are strategic investments that shape/change MNEs' organization structures. However, some of the decisions may belong to the category of management/operational decisions. Hypotheses 5.1 posits a positive relation between the locus of decision-making of IT systems investments and the locus of decision-making for strategic issues. Hypotheses 5.2 posits positive relations also between the locus of decision-making of IT systems investments and the locus of management/operational decision-making.

The Spearman Rank Correlation Coefficients are calculated for each function and at each subsidiary location.⁴ Table 6B shows Spearman Rank Correlation Coefficients of Asian subsidiary

⁴ For the Pearson's correlation, the assumption is that data come from bivariate normal population. For the Spearman's correlation, no assumptions are made about the nature of the population

data. No coefficients of Asian, North American and European samples support the Hypotheses 5.1 and 5.2 at 5% significant level. This indicates that decision delegation of IT systems investments to overseas subsidiaries is not a monolithic activity, but a complex activity which is not fully explained by the research design of this study.

The Locus of Decision-making for International Transfer Pricings

Table 7A shows the responses for the locus of decision-making of international transfer pricings. Eighteen respondents indicated that parent companies are taking initiatives in setting international transfer prices. Only one respondent answered that international transfer prices are set by the subsidiaries. The results indicate that the degree of authority delegation of international transfer pricings to overseas subsidiaries is low.⁵ The low authority delegation implies that MNEs have been moving to integrated international production strategies. Subsidiaries are closely tied into overall enterprise, producing intermediate products for internal sale to other MNE's business units.

(Insert Table 7 about here)

Relationships between the Locus of Overall Strategic Decision-making and the Locus of International Transfer Pricing Decisions (H6)

Hypothesis 6 assumed positive relations between the locus of overall strategic decision-making and the locus of international transfer pricing decisions. As already reported, the mean values of the locus of decision-making are low for both the overall strategic decisions (Table 2A) and the international transfer pricing decisions (Table 7A). Spearman Rank Correlation Coefficients in Table 7B show weak correlations for the Asian subsidiaries. However the relationship is not significant, even at 10% level. Hypothesis 6 is not supported. This indicates that decision delegation of international transfer pricing decisions is also not a monolithic activity.

Table 8 provides a summary of analysis results discussed above.

sampld. Thus the Spearman correlation coefficient is appropriate for variables with ordered codes as well as quantitative variables. To compute the Spearman correlation coefficient, SPSS uses the rank order of each data value in the formula for the Pearson correlation coefficient. Like the Pearson correlation coefficient, the values of this statistic range between -1 and +1.

⁵ The questionnaire developed for this study did not have items measuring how the locus of international transfer decisions differs by overseas subsidiary's locations.

(Insert Table 8 about here)

IV. SUMMARY AND DISCUSSIONS

This study investigates the locus of decision-making between headquarters and overseas subsidiaries among Japanese MNEs with respect to decision nature and subsidiary geographic locations. The four hypotheses, H1, H5.1, H5.2 and H6 investigate decision nature, and H1 specifically examines differences of decision delegation in the *overall decisions* domain. Other three hypotheses, H2, H3, and H4 investigate decision delegation from the perspective of subsidiary geographic locations.

Results indicate significant differences in the locus of decision-making between strategic decisions and management/operational decisions. Consistent with H1, the decision authority delegated to overseas subsidiaries is found to be broader for management/operational decisions than about strategic decisions.

Concerning the hypotheses developed from the subsidiary geographic locations perspective, the delegation of decision authority for strategic decisions to overseas subsidiaries is much broader to North American subsidiaries than to Asian subsidiaries. The delegation of management/operational decision authority is also significantly broader to North American and European subsidiaries. The results are consistent with H2.

This study investigated the locus of individual/specific decision-making also. The authority delegation for overseas subsidiary's IT systems investments is found to be much broader for North American subsidiaries than for Asian subsidiaries in all three functional systems, i.e., financial accounting, managerial accounting and personnel systems. However significant differences are observed only between North American subsidiaries and Asian subsidiaries for the financial accounting and managerial accounting systems. H3 is supported partially. H4 investigates cultural and sociological influences on IT systems functions by subsidiary geographic locations. The hypothesis is supported partially also.

According to Ueno (2001), the recent extensive utilization of information and communication technologies has accelerated the convergence of business practices both inside and outside companies. He also focuses on enculturation among overseas subsidiaries caused and promoted by shared corporate creeds and visions, ethical and behavioral standards and manuals (e.g., Toyota Way, IBM Way, and etc.). Results of the present study indicate the existence of the differences between overseas subsidiary locations. In other words, the perception about the overseas

subsidiaries and managers held by Japanese headquarters is still impacted by the stereotypes described in Section II.

H5.1, H5.2 and H6 developed from the decision nature perspective aim to confirm the consistency between individual/specific decision-making and overall decision-making. Results show no correlation between the locus of decision-making for the overall strategic decisions and for overseas subsidiary's IT systems investment decisions (H5.1). Also, no significant correlation is found between the locus of decision-making for the overall management/operational decisions and for overseas subsidiary's IT systems investment decisions (H5.2). This finding indicates the possibility that IT investments are made on some basis other than the traditional strategy-operation distinction. This somewhat surprising finding suggests that further study is needed on this issue.

For the international transfer pricing decision, the authority delegation to overseas subsidiaries is found to be low. As described before, transfer pricing decisions substantially affect both headquarters and subunits financial performance and cash flows. Therefore, the low authority delegation that is found on this decision (Table 7A) coincides with what we found for strategic decision-making. However, no significant correlation between the locus of decision-making for the overall strategic decisions and for international transfer pricing decisions (H6) is found. As with the H5 hypotheses, this raises the possibility of a different driver than the traditional strategy-operation distinction.

The above results imply that the decision delegation is not a monolithic activity, but a complex activity which is not fully comprehended by our present research framework, especially the portion related to H5 and H6. Situational factors relating to individual decisions, such as industries, company, length of overseas operations, ethnic composition of local management staff, etc. might have intervened in the above relation and made the correlations weak.

Japanese MNEs accelerated their entry into foreign markets after the Japanese domestic market saturated. Recently, their focus is more on whether to recruit foreign CEOs and board members, both for headquarters and overseas subsidiaries, who have skill and experience applicable to the globalized business society and also, communication competency.⁶ Talented local country

⁶ Sony Corporation recruited Howard Stringer, Chairman as a Chief Executive Officer, since June 2005. He added the title of President in 2009. Nippon Sheet Glass Co., Ltd (NSG) acquired the UK-based glass manufacturer Pilkington plc in June 2006. Pilkington is a world leading

management know local product markets and supply-chains better, however, without delegating decision authority adequately, their competency will not be exploited. The research questions and findings in this study could provide cues for designing effective headquarters-to-subunit interfaces; and this study contributes by identifying current decision authority locations in leading Japanese MNEs.

The present study has a number of limitations. Firstly, the research design may not accommodate the effects of the diversified organization architectures of Japanese MNEs sufficiently. For example, an in-house company in Panasonic that is called a (business) domain company comprises multiple product divisions. Overseas manufacturing subsidiaries are generally controlled by a (product) division. However Panasonic and others adopt matrix organization structures for overseas subsidiaries: A subsidiary is controlled by both regional headquarters (RHQ) and a product division.

Another limitation is caused by the data used. The validity of the findings is dependent upon survey date and timing. The business environment of MNEs is extremely dynamic. Asian countries such as Taiwan, Korea, Thailand, Malaysia, China, India, Vietnam, etc. are changing every day. Even if the perception and image held by managers at parent companies can be very slow to change, using current data is important. A longitudinal study is more desirable to ascertain whether and what changes taking place concerning the locus of decision-making.

Again, it should be noted that the findings from the present study are derived from the perceptions held by parent company managers. No data was collected from local subsidiary managers.

Since this study is a first step, future studies are expected to develop more refined research designs so that the above-listed flaws can be addressed. Investigations and comparisons concerning authority delegation either among overseas manufacturing subsidiaries, among overseas sales and marketing subsidiaries or among financial subsidiaries could provide more useful findings for practitioners if they are conducted under adequate research designs.

glassmaker with global operations in 24 countries. Stuart Chambers, former CEO of Pilkington, served as CEO of NSG since February 2007 until September 2009, as President from June 27, 2008 to September 2009 and as its Group COO from 2007 to 2008. On 29 June 2010, Craig Naylor (former senior vice president of DuPont) took over as President and CEO of NSG from Katsuji Fujimoto, who is non-executive chairman of NSG group now.

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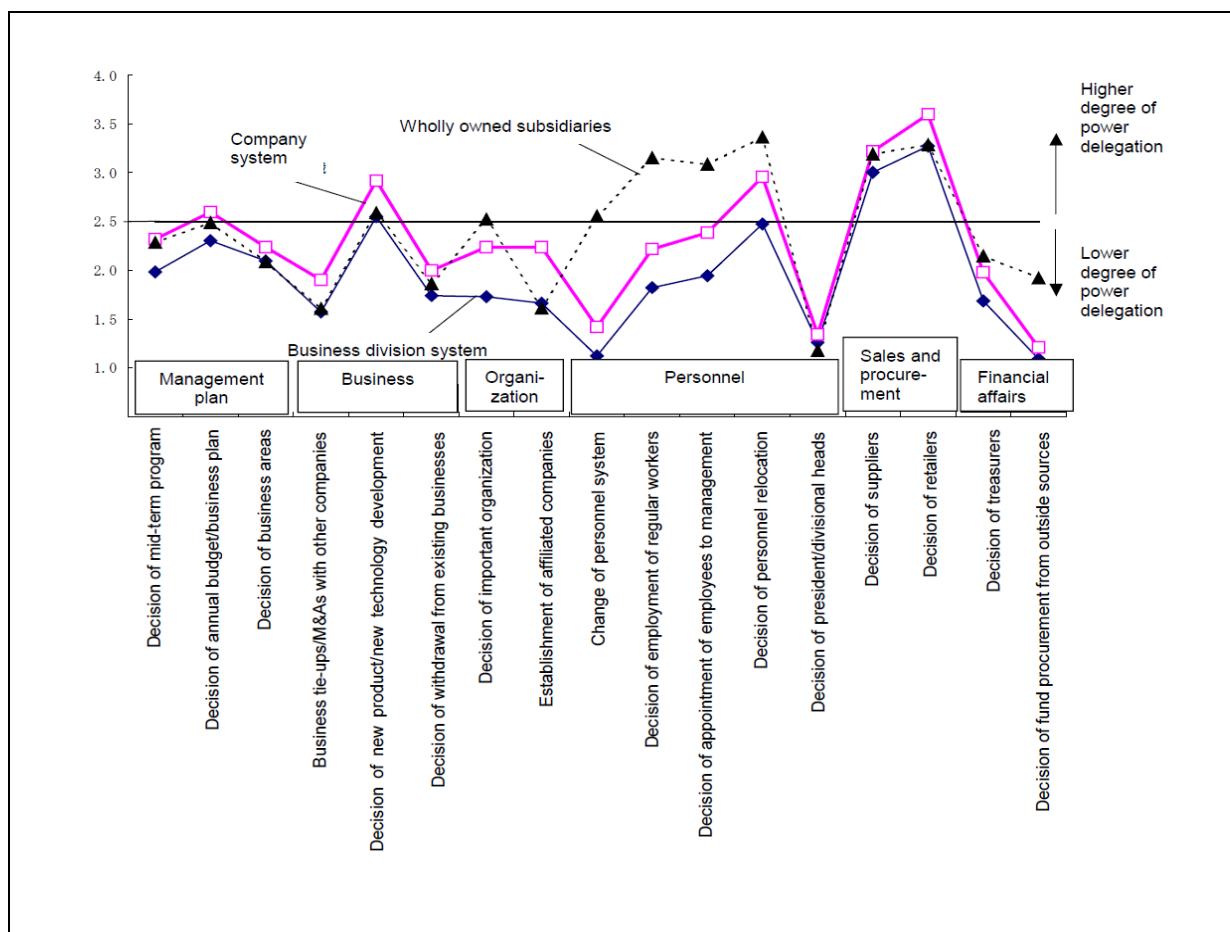


FIGURE 1.

Degree of Decision Authority Delegation by Functional Areas and Organization Types.

Source Miyagi and Inagaki (2003)

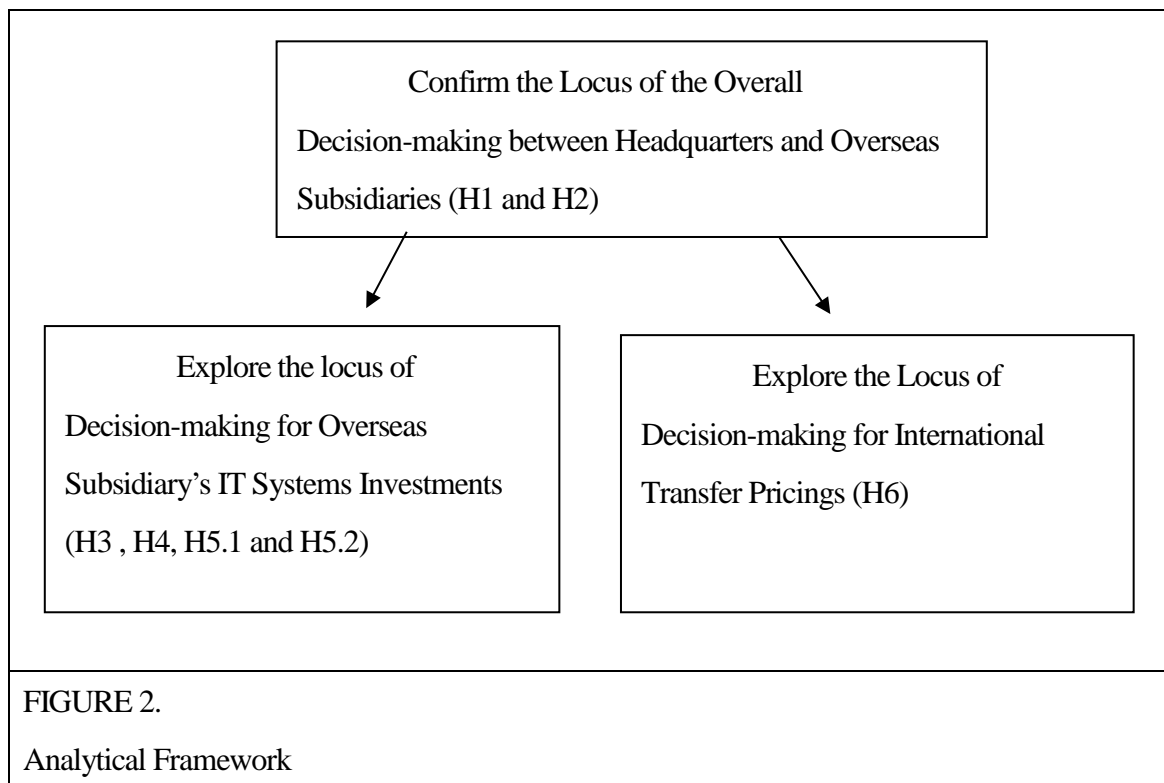


TABLE 1

Panel A. Distribution of Responding Companies by Industry

Industry	Number	Percentage
Food Processing	6	8.1%
Textile	4	5.4%
Pulp/Paper	1	1.4%
Chemicals	10	13.5%
Drugs	2	2.7%
Rubber Products	1	1.4%
Glass	3	4.1%
Nonferrous metals	1	1.4%
Metals	3	4.1%
Machinerv	4	5.4%
Electrical and Electronics Equipments	13	17.6%
Transportation Equipments	4	5.4%
Precisions	3	4.1%
Other Products	6	8.1%
Transportation by land	3	4.1%
Wholesalers	6	8.1%
Retailers	4	5.4%
Total (N)	74	100.0%

Panel B. Distribution of Responding Companies by Overseas Subsidiary Locations

Locations of Overseas Subsidiaries	Number of Companies
Asia, North America & Europe	42
Asia & North America	11
Asia & Europe	4
North America & Europe	4
Asia	9
Other	4
Total	74

TABLE 2

Panel A.

The Locus of Decision-making by the Decision Nature and by Subsidiary's Locations

Locations	Decision Nature	5	4	3	2	1	Mean
Asia (N=67)	Strategic	0	5	10	29	23	1.96
	Management/Operational	1	25	14	23	4	2.94
North America (N=55)	Strategic	0	8	12	23	12	2.29
	Management/Operational	3	25	10	14	3	3.20
Europe (N=48)	Strategic	1	3	13	20	11	2.23
	Management/Operational	2	24	10	10	2	3.29

All authority is delegated to a subsidiary = 5. A portion of authority is reserved by a parent = 4.
 fifty-fifty = 3. most authority is reserved by a parent = 2. almost all authority is reserved by a parent = 1.

Panel B.

The Locus of Decision-making by Decision Nature and Subsidiary's Locations

-Paired Comparison T Test-

Strategic Decisions vs. Management/ Operational Decision.	Paired Differences		t	df.	Sig.(2-tailed)
	mean	Std. Dev.			
Pair 1 Asia	-.99	.98	-8.254	66	.000
Pair 2 North America	-.91	1.06	-6.367	54	.000
Pair 3 Europe	-1.06	.98	-7.539	47	.000

all authority is delegated to a subsidiary = 5. a portion is reserved by a parent = 4. fifty-fifty = 3. most
 authority is reserved by a parent = 2. almost all authority is reserved by a parent = 1.

TABLE 3.

The Locus of Decision-making by Subsidiary's Locations

-Paired Comparison T Test-

	Paired Differences		t	df.	Sig. (2-tailed)
	Mean	Std. Dev.			
Strategic Decision-making					
Pair 1 Asia vs. North America	-.27	.63	-3.083	51	.003
Pair 2 Asia vs. Europe	-.17	.64	-1.833	46	.073
Pair 3 North America vs. Europe	.0930	.37	1.666	42	.103
Management/Operational Decision- making					
Pair 1 Asia vs. North America	-.19	.56	-2.470	51	.017
Pair 2 Asia vs. Europe	-.21	.59	-2.483	46	.017
Pair 3 North America vs. Europe	.0233	.27	.573	42	.570
All authority is delegated to a subsidiary = 5. a portion is reserved by a parent = 4. fifty-fifty = 3. most authority is reserved by a parent = 2. almost all authority is reserved by a parent = 1.					

TABLE 4. The Locus of Decision-making for Overseas Subsidiary's IT Systems Investments						
	5	4	3	2	1	Mean
Financial Accounting						
Asia N=60)	16	27	6	5	6	3.69
North America N=46)	24	15	3	2	2	4.24
Europe N=43)	19	15	4	3	2	4.07
Management Accounting.						
Asia N=55)	16	22	6	5	6	3.67
North America N=45)	23	15	3	2	2	4.22
Europe N=41)	18	14	4	3	2	4.05
Personnel Management.						
Asia N=55)	29	13	5	4	4	4.07
North America N=43)	30	7	3	2	1	4.47
Europe N=40)	29	4	3	3	1	4.43
A subsidiary makes all = 5. Half-and-half = 3. A parent makes all = 1						

TABLE 5.

The Locus of Decision-making of IT systems Investments by Subsidiary's Locations

-Paired Comparison T Test-

	Paired Differences		t	df.	Sig.
	Mean	Std. Dev.			(2-tailed)
Financial Accounting					
Pair 1 Asia vs. North America	-.04	.82	-3.159	42	.003
Pair 2 Asia vs. Europe	-.31	1.00	-2.007	41	.051
Pair 3 North America vs. Europe	.16	.59	1.639	37	.110
Management Accounting					
Pair 1 Asia vs. North America	-.38	.82	-2.993	41	.005
Pair 2 Asia vs. Europe	-.30	1.02	-1.864	39	.070
Pair 3 North America vs. Europe	.16	.60	1.640	36	.110
Personnel Management					
Pair 1 Asia vs. North America	-.18	.55	-2.014	39	.051
Pair 2 Asia vs. Europe	-.26	.99	-1.613	38	.115
Pair 3 North America vs. Europe	.0857	.51	1.000	34	.324
A subsidiary makes all = 5. Half-and-half = 3. A parent makes all = 1					

TABLE 6.

Panel A.

The Locus of Decision-making for Overseas Subsidiary's IT Systems Investments

-Paired Comparison T Test-

Asian subsidiary	Financial Actg. vs. Management Actg. (Mean (3.65, 3.67), N=55 , $p =.322$)
	Financial Actg. vs. Personnel Mgt* (Mean (3.71, 4.07), N=55, $p =.001$)
	Management Actg. vs. Personnel Mgt. * (Mean (3.70, 4.06) , N= 53, $p =.002$)
North American subsidiary	Financial Actg. vs. Management Actg. (Mean (4.22, 4.22), N=45, $\sigma =0$)
	Financial Actg. vs. Personnel Mgt. (Mean (4.28, 4.47), N= 43, $p =.118$)
	Management Actg. vs. Personnel Mgt. (Mean (4.26, 4.45), N=43, $p =.118$)
European subsidiary	Financial Actg. vs. Management Actg. (Mean (4.05, 4.05), N=42, $\sigma =0$)
	Financial Actg. vs. Personnel Mgt.* (Mean (4.13, 4.43), N= 40, $p =.032$)
	Management Actg. vs. Personnel Mgt.* (Mean (4.10, 4.41), N=39, $p =.032$)
Subsidiary Makes all = 5. Half-and-half = 3. Parent makes all = 1	

Panel B.

Correlations between the Locus of Overall Decision-making and the Locus of Decision-making for IT Systems Investments for Asian subsidiaries

Spearman Rank Correlation Coefficient	Strategic Decisions	Management/Operational Decisions
Financial Accounting		
Correlation Coefficient	.200	.108
Significance(2-tailed)	.128	.416
Responses (N)	59	59
Management Accounting		
Correlation Coefficient	.231	.183
Significance(2-tailed)	.090	.182
Responses (N)	55	55
Personnel Management		
Correlation Coefficient	.091	.186
Significance(2-tailed)	.510	.173
Responses (N)	55	55

All authority is delegated to a subsidiary = 5. A portion is reserved by a parent = 4. fifty-fifty = 3. most authority is reserved by a parent = 2. almost all authority is reserved by a parent = 1.

TABLE 7.

Panel A.

The Locus of Decision-making for International Transfer Pricing Decisions

	5	4	3	2	1	Mean
Responses (N=41)	1	1	18	18	3	2.49
(%)	(2.4)	(2.4)	(43.9)	(43.9)	(7.3)	

Set up by a subsidiary=5. Based on the initiative of a subsidiary=4. Set up by negotiation=3. Based on the initiative of a parent = 2. Set up by a parent = 1.

Panel B.

Correlations between the Locus of Overall Strategic Decision-making and the Locus of International Transfer Pricing Decisions

Spearman Rank Correlation Coefficient	Asia	North America	Europe
Correlation Coefficient	.266	.036	.060
Significance (2-tailed)	.111	.848	.759
Responses (N)	37	31	29

All authority is delegated to a subsidiary = 5. A portion is reserved by a parent = 4. fifty-fifty = 3. most authority is reserved by a parent = 2. almost all authority is reserved by a parent = 1.

TABLE 8.

Summary of Analysis Results

1.The Locus of the Overall Decision-making between Headquarters and Subsidiaries

H1: The delegation of authority to overseas subsidiaries of Japanese MNEs is much more extensive for management and operational decisions than for strategic decisions	Supported (TABLE 2B)
H2: The delegation of decision authority to overseas subsidiaries is much broader to American and European subsidiaries than to Asian subsidiaries	Partial supported: H2 was not supported for management/operational decisions at European subsidiaries (TABLE 3).

2.The locus of Decision-making for Overseas Subsidiary's IT Systems Investments

H3: The delegation of decision authority for subsidiary's IT systems investments is much broader to American and European subsidiaries than to Asian subsidiaries	Partial support: H3 was supported only between Asian and American subsidiaries with respect to the investments to financial and management accounting functions (TABLE 5).
H4: The delegation of decision authority to overseas subsidiaries is much broader for personnel management systems than for accounting systems	Partial support: H4 was supported for the Asian and European samples, but do not for the US sample (TABLE 6A).
H5.1: The locus of subsidiary's IT systems investment decisions is positively related to the locus of overall strategic decision-making	Not supported (TABLE 6B)
H5.2: The locus of subsidiary's IT systems investment decisions is positively related to the locus of overall management/operational	Not supported (TABLE 6B)

decision-making	
3.The Locus of Decision-making for International Transfer Pricings	
H6: The locus of international transfer pricing decisions is positively related to the locus of overall strategic decision-making	Not supported (TABLE 7)